



# Using Conservation Drainage to Reduce Ravine Sedimentation in Seven Mile



## Clean Water Funds: 2012

Clean Water Grant	\$86,500
Leveraged Funds*	\$45,000
Total Project Budget	\$131,500

\* Leveraged Funds include required 25% local match

### Target Water:

7 Mile creek and the Lower Minnesota River

### Project Sponsor:

Nicollet County Soil and Water Conservation District

### Grant Period:

January 2012—December 2013

### Project Contact:

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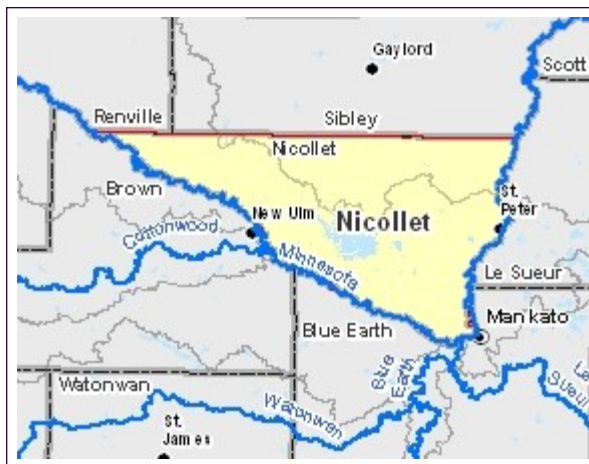
C12-S2 - Conservation Drainage

## Project Narrative

This project aims to significantly reduce the amount of sediment transfer from eroding bluff areas to Seven Mile Creek during spring snowmelt and rain events throughout the year. This will be accomplished by installing and maintaining drop structures and reinforcing the existing splash pool at the outlet pipe without destabilizing the surrounding bluffs. When applied in tandem, this project will reduce the peak flow rate to ravine areas while shielding and protecting the bluff itself from eroding.

At the same time, the splash pool will dissipate water energy at the base of the water fall area allowing water to flow with less

energy to the lower part of the stream. Upland conservation practices will be implemented to retain water on the land. These types of conservation practices have proven to reduce sediment, phosphorus and in some instances nitrogen. In addition, subsequent monitoring will take place to demonstrate the effectiveness of combining all practices within an entire stream system.



## Proposed Outcomes:

### Project Outputs:

Reduced sediment delivery to lower portion of 7 mile creek originating at ravine drop (waterfall) portion of the waterway. - 7 Mile creek and the Lower Minnesota River

Reduced rate flow peaks to lower 7 mile creek during rain events - 7 Mile creek and the Lower Minnesota River

### Proposed Reductions:

3,500 lbs/year Phosphorus

15 tons/year Sediment

## Actual Outcomes:

Project in Progress

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